

Patronages:



Modena Joint Arthroplasty Enabling Technology

Meeting

4th JULY
2025

F ————— SC
Fondazione Collegio San Carlo

FONDAZIONE
MASSIMO E SONIA
CIRULLI

Course Chairman: F. Catani, *Chief of the Orthopaedic Surgery Department of Modena and Reggio Emilia University*
Scientific Committee: A. Marcovigi, L. Tarallo, F. Zambianchi

Invited Faculty:

- | | | | |
|-----------------------|-----------------------------|---------------------------|----------------------------|
| L. Angibaud (France) | J.P. Cobb (UK) | T. Karachalios (Greece) | S.M.P. Rossi (Italy) |
| D. Barrett (UK) | R. Cohen (USA) | A. Klasan (Austria) | M. Schiraldi (Italy) |
| F. Benazzo (Italy) | M. Engl (Italy) | S. Lustig (France) | L. Tarallo (Italy) |
| B. Bloch (UK) | A. Gasbarrini (Italy) | T. Luyckx (Belgium) | M. Trevisan (Italy) |
| M. Borroni (Italy) | G. Giordano (France) | M. Mantovani (Italy) | A. Tripodo (Italy) |
| A. Camporese (Italy) | F. Haddad (UK) | A. Marcovigi (Italy) | E. Tsiridis (Greece) |
| R. Castricini (Italy) | M. Hirschmann (Switzerland) | G. Peersman (Belgium) | G. Van Hellemond (Holland) |
| F. Catani (Italy) | B. Innocenti (Italy) | G. Porcellini (Italy) | J. Victor (Belgium) |
| R. Civinini (Italy) | S.A. Jerabek (USA) | M. Pungitore (Italy) | S. Zaffagnini (Italy) |
| J. Chaoui (France) | | C. C. J. Rivièrè (France) | F. Zambianchi (Italy) |

7.45 Registration of participants

Welcome coffee and beverages

8.15 Introduction of the meeting, F. Catani
8.20 Speech of the Authorities, Prof. M. Dominici (Chief of the University Department); Ing. L. Baldino (CEO of the University Hospital); Dott.ssa F. Maletti (on behalf of the Mayor of Modena); Dr. M. Borroni (on behalf of SECEC); Prof. S. Lustig (on behalf of Pres. EKS), Prof. E. Tsiridis (President of EHS); Prof. F. Haddad (President of IHS); Prof. T. Karachalios (President of Effort); Prof. R. Civinini (on behalf of President SIOT)

I SESSION: Unmet surgical and clinical needs: the pillars for developing joint arthroplasty enabling technology

Moderators: F. Catani, F. Haddad
8.45 JA enabling technology: decision making process made by marketing or clinical needs? R. Cohen
8.55 THA, F. Haddad
9.05 TKA, J. Victor
9.15 UKA, S. Lustig
9.25 Bi-Cruciate Retaining Knee, J. P. Cobb
9.35 TSA & RSA, G. Porcellini
9.45 Spine, R. Ghemandi
9.55 Image-less and imaged-based enabled technology in primary and revision surgery: accuracy, precision and planning, F. Benazzo

II SESSION: HIP enabling technology

Moderator: E. Tsiridis, J. P. Cobb
10.05 Single wedge stem fixation with modified stem anteversion vs neck version with PLA, A. Marcovigi
10.12 Functional positioning data in RATHA with PLA, F. Haddad
10.19 DAA with RHTHA surgical technique and clinical outcomes, A. Camporese
10.26 RCT of manual vs robotic THA with PLA, F. Haddad
10.33 Advanced Navigation System in THA, R. Civinini
10.40 3D printed instruments and psi guides upskill surgeons performing ceramic hip resurfacing, J. Cobb
10.47 Spino-pelvic motion and THA kinematic alignment, C. C. J. Rivière
10.52 Shoulder Arthroplasty enabled technology particularly related to CTbased Nav and sensors, L. Angibaud
11.00 Discussion

III SESSION: KNEE ENABLING TECHNOLOGY

➔ Alignment
Moderators: M. Hirschmann, S. Lustig
11.25 Functional vs Mechanical TKA RCT, F. Haddad
11.32 Three-compartment phenotype concept (3D-FKP) of total knee arthroplasty alignment - Mismatch between distal femoral, posterior femoral and tibial joint lines in 83% of non- osteoarthritic and 88.8% of osteoarthritic knees, M. Hirschmann
11.39 Bone cut accuracy: new classification and rationale with image based robotic technology, S. Lustig
11.46 Associations between REAL Classification, CPAK Phenotypes, Alignment Severity and Surgical Management in Personalized Robotic-Assisted Total Knee Arthroplasty, E. Tsiridis
11.53 The impact of Alignment philosophy in TKA on trochlear Anatomy restoration is strongly linked to the LDFA, T. Luyckx
12.00 Soft-tissue management for TKA, L. Angibaud
12.07 AI-powered surgical planning for Total Knee Arthroplasty, J. Chaoui
12.15 The basics about Functional Alignment in Total Knee Arthroplasty - How Does it Work?, A. Klasan
12.22 Discussion

13:00 Lunch

➔ Soft tissue balancing – Is soft tissue balancing different based upon image-less or image-based systems?

Moderators: S. Zaffagnini, D. Barrett
14.00 Stability, Alignment, and Soft Tissue Balancing in Knee Biomechanics, B. Innocenti
14.07 Soft tissue balancing, component alignment and implant design relationship in TKA, J. Victor
14.14 Alignment and soft tissue balancing of Bi-cruciate TKA with CORI system, M. Schiraldi
14.21 Soft tissue balancing and alignment strategy with Omnibot system, A. Tripodo
14.28 Soft tissue balancing and alignment strategy with Skywalker system, T. Karachalios
14.35 Soft tissue balancing and alignment strategy with CR Mako system, M. Trevisan
14.42 Soft tissue balancing using image-less Velys system depending on alignment strategy, B. Bloch
14.49 A navigation-based analysis of native knee collateral ligament elongation patterns: CPAK classification subgroups exhibit phenotype specific ligament behavior, G. Peersman
14.56 Achieving medial stability with Nextar, M. Engl

➔ Third space

15.03 Anterior offset and patellar tracking enhancement using robotic assisted technology for TKA, S. Lustig
15.10 In vivo PFJ loading in the third space: how do we get it so wrong? D. Barrett
15.17 Posterior lateral and distal lateral resections influence post-operative patellar tilt in robotic- assisted total knee arthroplasty, M. Pungitore
15.24 TKA component alignment and patellar tracking in well balanced knee, F. Zambianchi
15.30 Discussion

➔ HIP and Knee Revision

Moderators: G. Van Hellemond, F. Haddad
16.00 Mako hip revision, S.A. Jerabek
16.07 Mako Robotic System in Revision of Unicompartmental Knee Arthroplasty: Surgical Technique and Outcomes, F. Haddad
16.14 Revision TKA with CORI system: tips and tricks, G. Van Hellemond
16.21 Literature reviews on RTKS using assisted technology, M. Mantovani
16.28 TKA revision and soft tissue balancing, G. Giordano
16.35 The Use of an Imageless Robotic System in Revision of Unicompartmental Knee Arthroplasty (UKA): Surgical Technique and Outcomes, S. M. P. Rossi
16.45 Discussion

IV SESSION: SHOULDER ENABLING TECHNOLOGY

Moderators: M. Borroni, L. Tarallo
17.10 The role of the Scapula in Shoulder Diseases: Reasons to Assess, quantify and rehab it, M. Mantovani
17.17 Intraoperative RSA motion and load sensor data using CT based navigation system, L. Tarallo
17.24 Optimal glenoid components alignment with Augmented Reality Guidance, R. Castricini
17.31 Kinematic study of scapula-thoracic joint using the "slow motion" sensors in cohort of patients treated with Navigated RSA: how the scapula-thoracic joint can influence the clinical outcomes in RSA, L. Tarallo
17.38 AI-powered preoperative surgical planning from Image to Implant: Shoulder Arthroplasty, J. Chaoui
17.45 Discussion
18.15 End of the meeting and conclusion, F. Catani

VENUE: Fondazione Collegio San Carlo - Via S. Carlo, 5 - Modena (MO)

CME: The event will award 6.3 CME credits to the following professions: MEDICAL DOCTOR (Physical Medicine and Rehabilitation, Orthopedics and Traumatology, Radiodiagnostics), PHYSIOTHERAPIST; ORTHOPEDIC TECHNICIAN.

LEARNING OBJECTIVE: 3

WITH THE UNCONDITIONAL CONTRIBUTION OF:



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REGISTRATION:



It is possible to register by visiting the website www.congredior.it

REGISTRATION TYPE	On site
Medical Doctor	€ 350,00
Physiotherapist, Orthopedic Technician Residents/ Master's Students	€ 250,00

20% discount on all registration fees to members of the Congress Patronages Societies